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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Ricky Amos, et al.

Examiner: Matthew C. Landau

Serial No:

09/995,031

Art Unit: 2815

Filed:

November 29, 2001

Docket: YOR920010633US1 (19031)

For: HIGH TEMPERATURE PROCESSING

Dated: October 18, 2005

COMPATIBLE METAL GATE ELECTRODE FOR pFETs AND METHOD FOR FABRICATION

Confirmation No: 9669

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

DECLARATION PURSUANT TO 37 C.F.R. §1.131

Sir:

We, Ricky Amos, Douglas A. Buchanan, Cyril Cabral, Jr., Alessandro C. Callegari, Supratik Guha, Hyungjun Kim, Fenton R. McFeely, Vijay Narayanan, Kenneth Rodbell, and John J. Yurkas, hereby declare that:

- 1. We are co-inventors of the subject matter described and claimed in the aboveidentified patent application.
- 2. Prior to October 18, 2001, which is the effective filing date of U.S. Patent No. 6,458,695 to Lin, et al. ("Lin, et al."), we have conceived and reduced to practice a semiconductor structure such as, a metal oxide semiconductor (MOS) or a field effect transistor (FET), that includes a semiconductor substrate having source and drain regions, a gate dielectric having a thickness of less than 100 Å on the semiconductor substrate; and a

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gate formed of a metal comprising Re on top of the gate dielectric, as is recited in Claims 1 and 10 of the present application.

- 3. As evidence of the conception and reduction to practice of the claimed semiconductor structure referred to in paragraph 2 prior to the effective filing date of Lin, et al., annexed hereto are Exhibits A and B. Exhibit A is a true photocopy of IBM Invention Disclosure YOR820010675, which was created prior to October 18, 2001. Exhibit A includes a Main Ideal section for the Invention Disclosure which describes the fabrication of a semiconductor structure such as a MOS or FET that includes Re as the gate electrode. Exhibit B is the inventors' write-up of the Disclosure that was also created prior to the effective filing date of Lin, et al. This write-up provides greater detail of the invention presently claimed including experimental data that establishes clear evidence of actual fabrication of the claimed semiconductor structure. All names and dates have been reducted in the preparation of this Declaration.
- 4. We do hereby declare that all statements made herein of our own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and that such willful false statements may jeopardize the validity or enforceability of the patent.

Dated	Ricky Amos
Dated	Douglas A. Buchanan
Dated	Cyril Cabral, Jr.

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Dated	Alessandro C. Callegari
Dated	Supratik Guha
Dated	Hyungjun Kim
Dated	Fenton R. McFeely
Dated	Vijay Narayanan
Dated	Kenneth P. Rodbell
Dated	John J. Yurkas

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